

**What is claimed is:**

1. An apparatus of recording a digital television broadcast signal, comprising:

a demodulator demodulating a received digital broadcast  
5 signal into data streams of individual channels;  
a data processor extracting data stream of a channel chosen among the individual channels and converting the extracted data stream to transport stream;

a stream analyzer analyzing data of the transport stream,  
10 and extracting and creating data stream- and/or recording-related information; and

a writing means writing information from said stream analyzer and the transport stream from said data processor to a recording medium in a format suitable to the extracted and  
15 created information.

2. The apparatus set forth in claim 1, wherein said stream analyzer analyzes each header of transport packets forming the transport stream to obtain said data stream- and/or recording-related information.

20 3. The apparatus set forth in claim 1, wherein said stream analyzer reconstructs the transport stream into MPEG-formatted stream and analyzes MPEG header of the MPEG-formatted stream to obtain said data stream- and/or recording-related information.

4. The apparatus set forth in claim 1, wherein said writing  
25 means writes the transport stream to the recording medium such that all high-density stream object units begin from starting

data of a GOP based on the data stream- and/or recording-related information.

5. The apparatus set forth in claim 1, wherein said data stream- and/or recording-related information is for trick play.

5 6. The apparatus set forth in claim 5, wherein said writing means writes the information for trick play in an only first pack of each high-density stream object unit.

7. The apparatus set forth in claim 6, wherein said writing means writes the information for trick play before the transport  
10 stream to be recorded in the first pack.

8. The apparatus set forth in claim 1, further comprising an interfacing unit transmitting the transport stream outputted from said data processor to an external apparatus.

9. The apparatus set forth in claim 1, wherein said writing  
15 means calculates time length of each high-density stream object unit based on presentation time stamp, which is one of the extracted information from said stream analyzer, and writes the calculated time length as navigation data.

10. The apparatus set forth in claim 1, further comprising  
20 a converter decodes the transport stream outputted from said data processor to analog video and audio signal, and outputs the analog video and audio signal to an external apparatus.

11. A method of recording a digital television broadcast signal, comprising the steps of:

25 (a) demodulating a received digital broadcast signal into data stream and extracting transport stream belonging to a

chosen channel among the demodulated data stream; and

(b) analyzing data of the transport stream, extracting and creating data stream- and/or recording-related information, and writing the data stream- and/or recording-related information  
5 and the transport stream to a recording medium in a format suitable to the extracted and created information.

12. The method set forth in claim 11, wherein said step (b) analyzes each header of transport packets forming the transport stream to obtain said data stream- and/or recording-related  
10 information.

13. The method set forth in claim 11, wherein said step (b) reconstructs the transport stream into MPEG-formatted stream and analyzes MPEG header of the MPEG-formatted stream to obtain said data stream- and/or recording-related information.

14. The method set forth in claim 11, wherein said step (b) writes the transport stream to the recording medium such that all high-density stream object units begin from starting data of a GOP based on the data stream- and/or recording-related  
15 information.

15. The method set forth in claim 11, wherein said data stream- and/or recording-related information is for trick play.

16. The method set forth in claim 15, wherein said step (b) writes the information for trick play in an only first pack of each high-density stream object unit.

17. The method set forth in claim 16, wherein said step (b) writes the information for trick play before the transport

stream to be recorded in the first pack.

18. The method set forth in claim 11, wherein said information for trick play includes location information of Infra-coded and predictive pictures.

5 19. The method set forth in claim 11, wherein said information for trick play consists of the number of GOPs and location information of each GOP.

20. The method set forth in claim 11, wherein said step (b)  
calculates time length of each high-density stream object unit  
10 based on presentation time stamp, which is one of the extracted  
information, and writes the calculated time length as navigation  
data.